

Pengyu Qian

Website: <https://pengyuqian.netlify.app/>
Email: pqian20@gmail.com

Updated June 2026

EDUCATION

Graduate School of Business, Columbia University , New York, NY Ph.D. in Decision, Risk, and Operations <i>Advisor</i> : Yash Kanoria <i>Dissertation title</i> : Online decision-making in networked marketplaces	2015 - 2021
Peking University , China B.Sc. in Mathematics	2011 - 2015

RESEARCH INTERESTS

My research studies the design and analysis of marketplaces in dynamic settings, using tools from probability, optimization and game theory. I am interested in foundational models driven by challenges in sharing economy and the allocation of public resources. My research emphasizes algorithms/mechanisms that not only have good theoretical guarantees, but also are simple, robust, and hence practical for real-world systems.

ACADEMIC APPOINTMENTS

Questrom School of Business, Boston University , Boston, MA Assistant Professor	2024-
Daniels School of Business, Purdue University , West Lafayette, IN Assistant Professor	2021- 2024

SELECTED WORK-IN-PROGRESS

11. **Coordinating Markets via Perturbed Prices** (with Suleyman Kerimov)
10. **Priority without Harm: Kidney Exchange with Early Donation**
(with Itai Ashlagi and Elaine Liu)
9. **Fair Real-Time Matching**

SELECTED WORKING PAPERS

8. **Congested Waiting Lists and Organ Allocation** (with Itai Ashlagi and Ravi Jagadeesan)
– An earlier version appeared in *ACM Conference on Economics and Computation (EC 2026)*.
7. **Availability is All You Need: Achieving Optimal Regret with Minimal Information for Dynamic Matching**
– Major revision at **Management Science**
(with Suleyman Kerimov, Mingwei Yang, and Sophie H. Yu).
6. **Price Discovery in Waiting Lists** (with Itai Ashlagi, Jacob Leshno, and Amin Saberi)
– An earlier version appeared in *ACM Conference on Economics and Computation (EC 2020)*.
5. **Large Deviations Optimal Scheduling of Closed Queueing Networks**
– Major revision at *Mathematics of Operations Research* (with Sid Banerjee and Yash Kanoria).
– An earlier version appeared in **ACM SIGMETRICS 2018**.

JOURNAL PUBLICATIONS

4. Optimal Incentive Design for Decentralized Dynamic Matching Markets

– Forthcoming at *Management Science* (with Chen Chen and Jingwei Zhang).

3. Incentivizing Resource Pooling

– Forthcoming at *Management Science* (with Chen Chen and Yilun Chen).

– First Place, 2024 INFORMS Junior Faculty Interest Group (JFIG) Paper Competition.

– First Place, 2024 Chinese Scholars Association for Management Science and Engineering (CSAMSE) Paper Competition.

– An earlier version appeared in *ACM Conference on Economics and Computation (EC 2024)*.

2. The Competition for Partners in Matching Markets

– *Management Science* 71(6):5230-5250, 2025 (with Yash Kanoria and Seungki Min).

– An earlier version appeared in *ACM-SIAM Symposium on Discrete Algorithms (SODA 2021)*.

1. Blind Dynamic Resource Allocation in Closed Networks via Mirror Backpressure

– *Management Science* 70(8):5445-5462, 2024 (with Yash Kanoria).

– An earlier version appeared in *ACM Conference on Economics and Computation (EC 2020)*.

– Honorable Mention, 2021 INFORMS Revenue Management and Pricing Student Paper Competition.

HONORS AND AWARDS

<i>First Place</i> , INFORMS JFIG (Junior Faculty Interest Group) Paper Competition	2024
<i>First Place</i> , 2024 CSAMSE Paper Competition	2024
<i>Honorable Mention</i> , INFORMS Jeff McGill Student Paper Prize	2021
Deming Doctoral Research Fellowship	2018
The Paul and Sandra Montrone Doctoral Fellowship	2017
<i>Finalist</i> , INFORMS Undergraduate Operations Research Prize	2015
Doctoral Fellowship, Columbia Business School	2015-2021
First Prize ‘Mingde’ Scholarship (4 year full scholarship)	2011-2015
Ranked 1/300,000 at the National College Entrance Exam in Guangdong Province, China	2011

TEACHING EXPERIENCE

Instructor, Questrom School of Business, Boston University

OM 323: Operations and Supply Chain Management (Undergraduate Core) Spring 2025, 2026

Instructor, Daniels School of Business, Purdue University

MGMT 361: Operations Management (Undergraduate Core) Spring 2024, 2023, 2022

Teaching Assistant, Graduate School of Business, Columbia University

B5101: Business Analytics (EMBA Core) Spring 2019

B6100: Managerial Statistics (MBA Core) Fall 2016, Spring 2018, Fall 2018

INVITED TALKS & PRESENTATIONS

Priority without Harm: Kidney Exchange with Early Donation

INFORMS Revenue Management and Pricing Conference 2026

Optimal Incentive Design for Decentralized Dynamic Matching Markets

INFORMS MSOM Conference 2026

Herbert Business School, University of Miami 2025

INFORMS Annual Meeting 2025

Marketplace Innovation Workshop 2025

INFORMS Applied Probability Conference 2025

Stochastic Networks, Applied Probability, and Performance Online Seminar 2025

Congested Waiting Lists and Organ Allocation

INFORMS MSOM Conference 2026

Zicklin School of Business, Baruch College 2026

University of Toronto Rotman Young Scholar Seminar 2024

Marketplace Innovation Workshop 2024

Incentivizing Resource Pooling

Stanford RAIN (Research on Algorithms and Incentives in Networks) Seminar 2024

ACM Conference on Economics and Computation (EC) 2024

INFORMS Annual Meeting 2023

Conference of the Chinese Scholars Association for Management Science and Engineering 2023

Marketplace Innovation Workshop 2023

The Competition for Partners in Matching Markets

INFORMS Applied Probability Conference 2023

INFORMS Annual Meeting 2021

Price Discovery in Waiting Lists

The Chinese University of Hong Kong, Shenzhen, School of Management 2022

ACM Conference on Economics and Computation (EC) 2020

Blind Dynamic Resource Allocation in Closed Networks via Mirror Backpressure

Daniels School of Business, Purdue University 2021

California Institute of Technology 2021

Marshall School of Business, University of Southern California 2021

Department of Management Science & Engineering, Stanford University 2020

Kellogg-Wharton OM Workshop 2020

ACM Conference on Economics and Computation (EC) 2020

INFORMS Annual Meeting 2019

MSOM Annual Conference 2019

ACM Conference on Economics and Computation (EC) Tutorial 2019

Marketplace Innovation Workshop 2019

Dynamic Pricing in Ride-hailing Systems

INFORMS Annual Meeting 2017, 2018

MSOM Annual Conference 2018

Marketplace Innovation Workshop 2018

PROFESSIONAL SERVICE

Cluster Chair for *INFORMS Annual Meeting 2024 Auctions & Market Design Cluster*.

Program Committee Member for *ACM Conference on Economics and Computation (EC) 2025, 2026*

Reviewer for *Operations Research, Management Science, Manufacturing and Service Operations Management, Production and Operations Management, Mathematics of Operations Research, Naval Research Logistics, Stochastic Systems, Transportation Science, Decision Science, Queueing Systems* journals, and *ACM Conference on Economics and Computation (EC), ACM Symposium on Theory of Computing (STOC), ACM-SIAM Symposium on Discrete Algorithms (SODA), Conference on Web and Internet Economics (WINE)*.